

WHAT IS CLAIMED IS:

1. A bearing unit for a wheel comprising:

a stationary race having stationary race track surfaces on a peripheral surface on the stationary side thereof to be supported and fixed by a suspension system in its used state;

a rotating race having rotating race track surfaces on a peripheral surface on the rotating side so as to fix a wheel and a braking rotating member in its used state; and

a plurality of balls provided between said rotating race tracks and said stationary race tracks, wherein a standard value for the mutual difference in diameter between these balls is not more than 1.0  $\mu\text{m}$ .

2. A bearing unit for a wheel according to claim 1, wherein the standard value for the mutual difference in diameter between of the balls is not more than 0.5  $\mu\text{m}$ .